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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/077,998	02/20/2002	Koichi Miyazaki	219867US8	4743

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ALEXANDRIA, VA 22314

EXAMINER

CONNELLY CUSHWA, MICHELLE R

ART UNIT	PAPER NUMBER
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2874

DATE MAILED: 03/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary**Application No.**

10/077,998

Applicant(s)

MIYAZAKI ET AL.

Examiner

Michelle R. Connelly-Cushwa

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) 9-15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-15 are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 0602.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

Applicant's election with traverse of Group I, claims 1-8 in the Response filed December 19, 2003 is acknowledged. The traversal is on the ground(s) that a search and examination of the entire application would not place a serious burden on the Examiner. This is not found persuasive because the ferrule holder of Invention I has separate utility, including coupling a fiber/ferrule to any optical device and the search required from Invention II is not required for Invention I.

The requirement is still deemed proper and is therefore made FINAL.

Claims 9-15 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the Response filed December 19, 2003.

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

The prior art documents submitted by applicant in the Information Disclosure Statement filed on June 14, 2002 have all been considered and made of record, except for the Mobarhan et al. reference (note the attached copy of form PTO-1449). The Mobarhan et al. reference has not been considered because there no publication date is provided for this reference.

Drawings

Sixteen (16) sheets of formal drawings were filed on February 20, 2002 and have been accepted by the Examiner.

Specification

The abstract of the disclosure is objected to because the abstract contains more than 150 words. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-4, 6 and 7 are rejected under 35 U.S.C. 102(e) as being anticipated by Jang et al. (US 6,184,987 B1).

Regarding claims 1, 6 and 7; Figures 2, 6, and 11 of Jang et al. disclose a ferrule holder (clip, 52, in Figures 2 and 6; or gripper, 106, in Figure 6; or clip, 300, in Figure 11) for holding a ferrule (48) in an optical ferrule-attached fiber (46) when the adjustment of the optical axis in the optical ferrule-attached fiber to be optically coupled with an optical part (LD, 30) is to be performed, the ferrule holder (52, 106 or 300) being characterized by a pair of pinching members (sides of clips, 52 and 300, and arms of gripper, 106) for pinching the side of the ferrule (48) through a line contact relatively

short in longitudinal direction of the ferrule. Additionally, each of the pinching members of the ferrule holder gripper (106; see Figure 4) includes a pinching groove formed therein and extending along the axis of the ferrule, wherein the pinching grooves are formed to provide a symmetric configuration about the axis of the ferrule.

Regarding claims 2 and 3; the ferrule holder (300) disclosed in Figure 11 includes a first pair of pinching members (sides, 304, of the clip) for pinching the ferrule through a line of contact relatively short in the longitudinal direction, and a further pair of pinching members (sides, 302, of the clip) for pinching the ferrule through a line of contact relatively long in the longitudinal direction of the ferrule, wherein the two pairs of pinching members (302 and 304) are formed integrally in one member (clip, 300).

Regarding claim 4; the side of the ferrule (48) is pinched in at least two locations through the line contact relatively short in the longitudinal direction of the ferrule or the point contact (see Figure 6).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jang et al. (US 6,184,987 B1).

Regarding claim 5; Jang et al. discloses all of the limitations of claim 5 as applied to claim 1 above, except for the relatively short line contact being equal to or longer than

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0.001 mm and less than 1 mm. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the relatively short line contact be equal to or longer than 0.001 mm and less than 1mm, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art (*In re Aller*, 105 USPQ 233); that discovering an optimum value of a result effective variable involves only routine skill in the art (*In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980)); and that a change in size is generally recognized as being within the level of ordinary skill in the art (*In re Rose*, 105 USPQ 237 (CCPA 1955)).

Regarding claim 8; Jang et al. discloses all of the limitations of claim 8 as applied to claim 1 above, except for at least one of the pinching members including measuring means for measuring the spacing between the pair of pinching members. One of ordinary skill in the art would have recognized that the diameter of the ferrule would be directly proportional to the space between each of the pair of pinching member of the gripper (106) disclosed by Jang et al., and would have recognized that it is advantageous to know the diameter of the ferrule when connecting the ferrule to optical parts to more easily determine that a ferrule of the correct size corresponding to the optical part has been chosen. Therefore, one of ordinary skill in the art would have found it obvious to include measuring means for measuring the spacing between the pair of pinching members of the gripper (106) disclosed by Jang et al. to quickly and easily determine the diameter of the ferrule placed in the gripper.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Janssen et al. (US 5,570,444) ; Irie et al. (US 6,606,435 B1) ; Flanders et al. (US 6,625,372 B1) ; and Wada et al. (US 6,279,353 B1) each disclose ferrule holders the pinch a ferrule for connecting and/or aligning the ferrule with an optical part.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Any inquiry concerning the merits of this communication should be directed to Examiner Michelle R. Connelly-Cushwa at telephone number (571) 272-2345. The examiner can normally be reached 9:00 AM to 7:00 PM, Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney B. Bovernick can be reached on (571) 272-2344. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general or clerical nature should be directed to the Technology Center 2800 receptionist at telephone number (571) 272-1562.

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Michelle R. Connelly-Cushwa

Michelle R. Connelly-Cushwa

Patent Examiner

February 20, 2004